

REMARKS

This is intended as a full and complete response to the Office Action dated March 14, 2006, having a shortened statutory period for response set to expire on June 14, 2006. Applicants have attached a Petition for a One Month Extension of Time, in accordance with 37 C.F.R. §1.136, extending the statutory period until July 14, 2006. Applicants request entry and consideration of the above noted amendments and the following remarks in response to the Office Action.

Applicants have amended claims 1-6, 16, and 25-26. Applicants have added new claims 38-40. Discussion of the amendments for claims 1-6, 16, and 25-26 are below. Applicants submit that the claim amendments for claims 3-6 have not narrowed the scope of the claims.

Restriction Requirement:

Claims 1-37 are pending in the application and stand restricted under 35 U.S.C. §121. The Examiner has required restriction of claims 1-37 of the present application to the following Groups:

Group I, including claims 1-31, is drawn to a catalyst composition, classified in class 502, subclass 152.

Group II, including claims 32-37, is drawn to a polymerization process, classified in class 526, subclass 170.

To facilitate the prosecution of this application, Applicants hereby confirm the election of claims 1-31, identified as Group I, with traverse and reserve the right to file a divisional application to the non-elected Group II claims. Claims 32-37 have been withdrawn.

Further, the Examiner requested an election of species. Applicants hereby confirm the election of species [3-tert-butyl-5-methyl-cyclopentadienyl)-(4-phenyl-2,7-di-tert-butylfluorenyl)dimethylsilane]zirconium dichloride, catalyst 7 of Example 19.

CORRECTION OF ABSTRACT

Applicants have provided a corrected abstract, which does not introduce any new matter.

CLAIM REJECTIONS:35 U.S.C. § 112

Claims 3-5 have been rejected as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Examiner stated that the limitation of "Flu is mono-substituted at the 4(5) position and is otherwise unsubstituted" is confusing, and requests clarification whether the Flu is mono-substituted at the 4 or 5 position.

Applicants refer to paragraph [0010] wherein the specification states "the fluorenyl group is mono-substituted at the 4 (or 5) position and is otherwise unsubstituted or is di-substituted at the 2,7 positions with alkyl or phenyl or substituted phenyl groups." By looking at, for example, formulas 4, 5, 6, one can see that the Flu may be located on either position 4 or position 5. Applicants have therefore amended claims 3-6 to more clearly state that the substitution is on the 4 or 5 positions, and respectfully request withdrawal of this rejection.

35 U.S.C. § 102(a) & (b)

Claims 1, 3-5, 9-11, 16, 20, and 26 have been rejected under 35 U.S.C. § 102(a) as being anticipated by Sone et al. (U.S. Patent No. 6,639,030). Specifically, the Examiner points to a listing of metallocenes in col. 4, lines 29-35 that includes diphenylsilanediy(cyclopentadienyl)(4-*t*-butylfluorenyl)zirconium dichloride, which the Examiner believes encompasses the instant claims. Claims 1, 3-5, 9-11, 16, 20, and 26 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Sunaga et al. (U.S. Patent No. 6,063,725). Specifically, the Examiner points to a listing of metallocenes in col. 6, lines 14-15, 39-40, and 53-54 that states isopropylidene(cyclopentadienyl)(4-methylfluorenyl)zirconium dichloride, which the Examiner believes encompasses the instant claims.

Applicants have amended claim 1 to state the bulky hydrocarbyl group in a, is a cyclic compound having from 3 to 30 carbon atoms. Support for this amendment can be found at paragraphs [0018]-[0020], specifically stating that the substituent at the 4 or 5 position may be "selected from alkyl (preferably branched), alkenyl (preferably

branched), cycloalkyl, heterocyclic, alkylaryl and aryl, containing from 3 to 30 carbon atoms." Furthermore, paragraph [0020] contains non-limiting examples of fluorenyl ligands having cyclic substituents. Paragraph [0018] states that the 4 position may be equivalent to the 5 position. Therefore, cyclic has the meaning commonly known to those of skill in the art and includes, for example, cycloalkyl, heterocyclic, alkylaryl, aryl, and aromatic compounds. Claim 2 has been amended in view of the currently amended claim 1. New claims 38-40 have been added, and do not present new matter. Support for these claims can be found at paragraph [0020]. As discussed in the Interview, Sone and Sunaga do not disclose these specific structures. Therefore, this amendment does not introduce new matter and Applicants respectfully request withdrawal of the rejection.

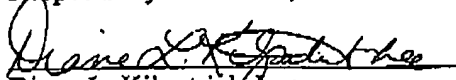
Claims 16 and 25 have been amended so that R_5 is an aromatic. The claim itself is direct support for this amendment, along with paragraph [0011]. Claim 26 has been amended to remove the reference to the tertiary butyl group in view of the amendment to claim 25. As discussed in the Interview, Sone and Sunaga do not disclose these specific structures. Therefore, this amendment does not introduce new matter and Applicants respectfully request withdrawal of the rejection.

With regard to dependent claims that have been rejected under Sone and Sunaga, the independent claims have been shown to overcome the reference and therefore the dependent claim rejections are moot.

In conclusion, Applicants submit that the references cited in the Office Action, neither alone nor in combination, teach, show, or suggest the claimed features. Having addressed all issues set out in the Office Action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request the same.

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Respectfully submitted,


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